

# A Closer Look at Dutch Doors

By Sarah Henken & Rachel S. Smith

**T**HE DUTCH DOOR HAS BEEN WITH US FOR a long time; originating in Holland back in the 1600s, it migrated to North America with Dutch settlers. Commonly seen in pre-Revolutionary War New York and New Jersey, this type of door has both an upper and lower leaf that swing independently of each other. The Dutch door has a very quaint and charming aesthetic, but was developed for purely practical purposes. In a time without air conditioning or convenient indoor light, these doors provided an excellent solution, allowing in light and creating ventilation while still keeping the farmyard animals out of the home. These doors can still be seen in historic architecture, museums and Dutch paintings dating back into the 1700s. A humorous example of such a painting is "One of the Family" painted by Frederick Cotman in 1880. The painting depicts a farmer sitting at his kitchen table for lunch while his plow horse hangs its head over the lower leaf of a Dutch door to eat out of the hand of the farmer's wife.

With changing times, the Dutch door lost much of its popularity and was relegated primarily to use in barns and stables. However, today we are seeing a rising

demand for the Dutch door both because of its nostalgic charm and the continued practicality of its design. Dutch doors can be found commercially and residentially in both interior and exterior openings. Several companies now produce aesthetically pleasing Dutch doors made of wood for exterior openings in businesses and residential homes, but Dutch doors are most commonly seen commercially and in interior openings where it is necessary to limit and control access without actually closing the door. Some common examples include pharmacy counters, post office counters, parts supply rooms, nurseries and daycares.

## Hardware Considerations

Due to the independently swinging lower and upper leaves of the Dutch door, different considerations are necessary when choosing the type and placement of hardware. Since a Dutch door has two halves, it requires four hinges instead of the usual three, and the frame needs to be prepped accordingly. The Hollow Metal Manufacturers Association (HMMA) suggests hinge locations at 5" from frame

Photos and Drawings Courtesy of Karpen Steel Custom Doors & Frames

head to top of hinge; 10" from the finished floor to the bottom of hinge; and 5" from the split line to the nearest edge of the intermediate hinges. A continuous hinge can be used, which is also a good option when retrofitting an existing frame for a dutch door.

Additionally, one must consider the locking hardware; Dutch doors often have the top leaf latched into the bottom leaf with surface-mounted Dutch door bolts or Dutch door quadrants. Mortised or bored deadlocks or flush bolts are also commonly used, latching into a strike in the top of the lower half of the door. The door is then secured to the frame by traditional locking hardware such as preassembled, bored or mortised locks. Depending on the door's location and required security, both the upper and lower leaves may be secured to the frame, which requires prepping the frame for two strikes. When both leaves are secured to the frame, the latch between the two halves may be omitted, though it is often retained to allow both halves of the door to be opened or closed simultaneously.

According to both the Steel Door Institute (SDI) and HMMA standards, Dutch doors may be fire-rated either with the top leaf secured only to the bottom leaf or with both leaves secured to the frame. SDI 111-B Technical Data Series shows the recommended details for both standard and fire rated Dutch doors (available at [www.steeldoor.org](http://www.steeldoor.org)). However, many building codes require that both leaves be independently secured to the frame in order for the door to be fire-rated. Labeled Dutch doors also require an astragal between the leaves. This is usually welded to the pull side of the top leaf of the door, as shown in Drawing 1.

Since the purpose of a Dutch door is usually to afford some type of human interaction over the lower portion of the door, the bottom leaf of the door is generally about 40" high regardless of the overall opening height, as shown in Drawing 2. This retains the practicality of the door but also requires that the latching hardware be installed at a location that is lower than the usual 40 5/16"–48". Additionally, depending on the function required, Dutch doors can be installed in pairs with both being Dutch doors or one being Dutch and the other a standard full door.

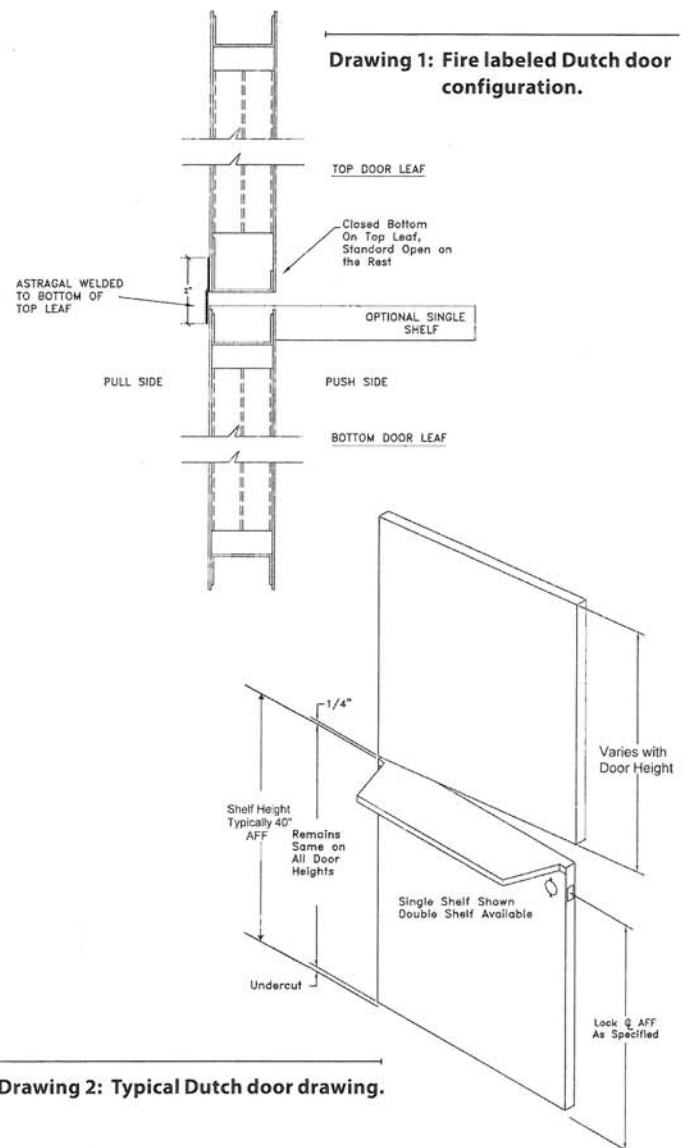
Dutch doors can be fitted with vision lights and louvers the same as any standard door as long as the opening required does not interfere with the split line between the two halves of the door.

## Wicket Doors

Another variation of the Dutch door is the type often seen in post offices and pharmacies where the top leaf of the door features a wicket door, which is a smaller, independently operating door within the larger door structure. (Photo 1) A wicket door offers additional control and security of the opening. The wicket doors can be hung on either continuous hinges or



**Photo 1:** Here is an example of a standard door with a wicket door that was to be installed in a pharmacy.



**Drawing 2:** Typical Dutch door drawing.



butt hinges, and can be secured either with surface mounted locks or mortised locks with the strike in the main door. Like Dutch doors, wicket doors can also be manufactured with a shelf. (Drawing 3)

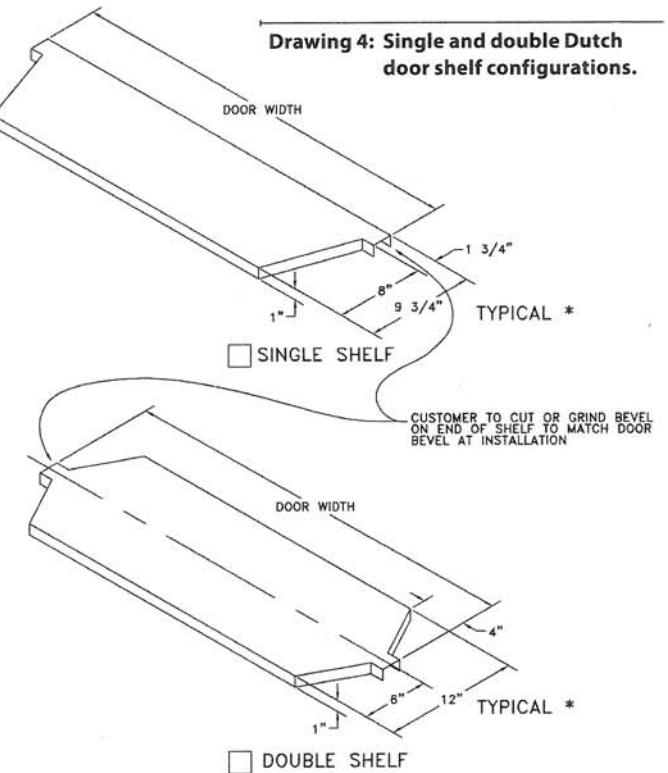
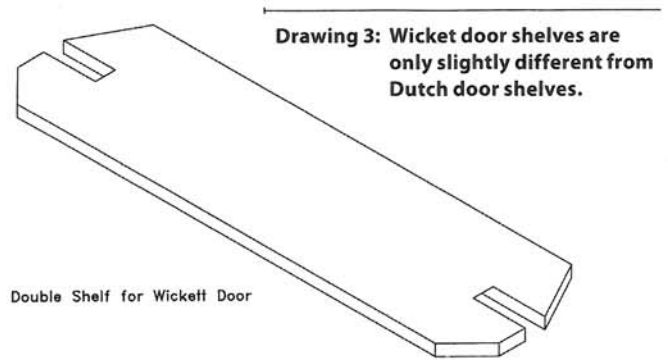
## Dutch Door Shelves

An additional feature commonly used with Dutch doors is the Dutch door shelf. The shelf provides a working space when the door is used as a pass through



**Photo 2: A copper Dutch door used as a ticket booth in downtown Asheville, NC.**

for openings such as coat checks, ticket booths, supply rooms and pharmacies. The copper Dutch door in Photo 2 shows the shelf's use as a ticket booth. This shelf can protrude from either one or both sides of the bottom leaf of the door. Typical shelf configurations are shown in Drawing 4. The standard size for a single-sided shelf is 8", which refers to the distance the shelf projects from the face of the door. For a double-sided shelf, the standard width is 12", which refers to the overall width of the shelf and not just the overhanging portions. A double shelf does not have to be equally distributed but can extend unevenly over the door. When purchasing a Dutch door with a shelf, the door and shelf are shipped separately. The shelf is then field installed.



## Conclusion

The Dutch door has been with us for nearly 400 years. It has wound its way through history, moving from the doorways of humble dwellings, barns, stables and stores to restaurants, theaters and across the oceans to new continents. It has branched into new mediums, proving its usefulness in both the wood door and hollow metal door industries. Dutch door designs have proved extremely practical from one generation to the next and will no doubt continue to be treasured by generations of the future. 

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